Region 3 FY 2012 Annual Work Plan
Submitted 12/16/2012

1. Introduction

1.1. Present the vision, goals, and objectives for the regional inventory and monitoring initiative.

The vision, goals, and objectives for the regional inventory and monitoring initiative step down from the Region 3 Division of Biological Resources (DBR) Strategic Plan; support for refuge inventory and monitoring in Region 3 is provided by the Inventory and Monitoring (I&M) Branch and Water Resources Branch. The FY2011 Work Plan includes a full description of the goals and objectives from the DBR Strategic Plan. We list the goals and objectives relevant to the I&M Branch below.

Vision for the Region 3 DBR

The DBR will provide leadership and support for the field, region and national offices. We will create an environment where every station understands their role in sustaining species, populations, communities, assemblages, and systems as part of our continental conservation reserve. Working with our staffs and partners we will develop an adaptation strategy for our natural resources as we face unprecedented climate and other types of environmental change. In doing so, we will promote scientific rigor, excellence in practice, effectiveness, and efficiency of action while clearly communicating among ourselves, our partners, and with the American public.

Goal 1: Staff and stations understand where they fit into the continental conservation reserve system, what their priorities are and how they can best function to ensure net conservation gains.

Objective 1: Support the development and implementation of a National Climate Change Adaptation Strategy by working within and across our LCC's to promote resistance, resilience, response, and realignment as needed to maintain the biological health, diversity, and environmental health of the NWRS.

Objective 2: Work in conjunction with stations and LCCs to conduct landscape scale assessments regarding the status and trends of important ecological stressors in relation to NWRS land holdings and in relation to the greater conservation estate.

Goal 2: Sustain diverse, distributed, and abundant populations of fish, wildlife, and plants by conserving and managing for healthy habitats in a network of interconnected and ecologically functioning landscapes for current and future generations of the American public.

Objective 1: Region 3, in partnership with private land owners and other conservation entities, will conserve breeding, wintering, and migration habitat sufficient to meet the migratory bird population objectives and other high priority resource management objectives of Region 3, while contributing to the conservation of the ecosystems of the United States.

A. Advance the practice of adaptive management by implementing projects focused on high priority management problems identified by refuge managers. Current examples include: The Integrated Waterbird Management and Monitoring, the Preserving Native Sod, and the Reed Canary Grass Projects. Projects nearing completion include: the Impoundment Study and the Fire/Cattail Project.

Goal 3: Emphasize the science linking work at project sites to achievement at broader scales, including landscapes, major ecoregions, and entire species ranges.

Objective 1:

A. Provide expertise and participate in adaptation planning for focal species and habitats in Region 3 within the LCCs and for supporting changes in laws, regulations and policies that are barriers to successful implementation of a National Climate Adaptation Strategy within the NWRS.
B. Working in collaboration with Conservation Planning staff, develop a stepped down vision and plan for adaptation within the NWRS in Region 3.

C. Participate in and support Landscape Conservation Cooperatives by providing expertise in modeling, decision-making, planning, design, delivery, inventory, monitoring, and research.

Objective 2: Plan and deliver landscape conservation actions that support climate change adaptation by fish and wildlife of ecological and societal significance.

Goal 4: Promote the use of models to characterize systems and to tie populations to landscapes.

Objective 1: Practice the use of models and decision analysis to evaluate the decisions managers at all levels will need to make in regard to our fish, wildlife and plant resources in context with the current and future conservation estate within Region 3.

Goal 5: Develop, maintain and foster a highly trained, experienced workforce who enjoy their work and believe their efforts result in demonstrable conservation successes and personal satisfaction.

Objective 1: Provide professional development opportunities, Technical Training, Continuing Education, Workshops, and Adaptive Management Consultancies to NWRS staff and their partners.

Objective 2: Provide support to NWRS staff, State and Tribal managers and other partners through the timely provision of research results and best management practices, decision tools, training, protocols and databases.

Goal 6: Participate in the development of a national strategy for monitoring abiotic and biotic resources that are most vulnerable to climate change.

Objective 1: Develop monitoring and research partnerships that make available complete and objective information to plan, deliver, evaluate, and improve actions that facilitate fish and wildlife adaptation to accelerating climate and other types of environmental change.

A. Develop biological inventory, monitoring and research partnerships at the Regional and National level that will provide the information needed to develop successful adaptation strategies for fish, wildlife and plants.
B. Provide inventory and monitoring capability to the NWRS and in support of the LCCs.
C. Work within LCCs, regionally and nationally to develop collaborative research partnerships in the pursuit of research that address fish and wildlife adaptation to climate and other types of environmental change.
D. Inventory and monitoring activities are coordinated and follow approved protocols and rigorous statistical designs.

Objective 2: Develop a regional plan and inform local scale monitoring by providing coordinated monitoring opportunities, common protocols, and guidance on sampling design.

A. Work with the DBR staff to develop guidance for stations on what an exemplary inventory and monitoring program entails.
B. Conduct Biological Program and Wildlife and Habitat Reviews.
C. Support the evaluation and improvement of the condition, quantity, quality and timing of water resources and other abiotic factors affecting our NWRS.
D. Monitor and reduce susceptibility to disease, pathogens, and pests.

Goal 7: Promote monitoring and data management systems that provide a strong foundation of accountability for our actions.

Objective 1: Develop user-friendly data management systems and protocols that will support our actions and allow us to account for our actions at all levels, field, region, and nationally.

A. Promote and support data management, data archival and summarization.
B. Provide guidance on metadata and data stewardship.

Goal 8: Data are managed, archived, summarized and served promptly, easily and made available to the public.

Objective 1: Working with others, provide up-to-date information to staff and to the public.

Goal 9: Develop new and innovative science techniques and applications.

Objective 1. Conduct management oriented research and assumption driven research in support of modeling efforts and in support of conservation assessments.

A. Conduct or foster research that addresses our most important information gaps.
B. Facilitate research to address primary uncertainties in fish and wildlife management.

Objective 2. Support Land Management and Research Demonstration sites, Adaptive Management Projects, and other research as appropriate.

Goal 10: Our staff, our partners and the American public understand and support the conservation efforts of the national wildlife refuge system in Region 3.

Objective 1: Working with others, provide up-to-date information to staff and to the public.

1.2. Describe how the regional I&M initiative is organized and planned focus areas.

The Region 3 I&M branch steps down from the national program and the Region 3 DBR Strategic Plan and is managed by the R3 DBR (Appendix B). In Region 3, the Chief, DBR provides overall guidance and support for the I&M activities in the region, and all staff in the DBR work together to meet the needs. The Regional Inventory and Monitoring Coordinator leads the Branch of Inventory and Monitoring (Appendix B) and coordinates with the national Inventory and Monitoring office in Fort Collins, CO and the other Regional I&M Coordinators.

1.3. **Explain how the regional I&M initiative integrates with the refuge biological program in the region.**

In FY11, the Region laid the groundwork for guidance regarding the attributes of an exemplary station-level biological program, including identifying monitoring priorities and designing appropriate inventories and monitoring. A report was drafted and is in review by the Region 3 Refuge Leadership Team. This guidance will be integrated into the station Wildlife and Habitat Reviews, which are ongoing.

The draft Service Inventory and Monitoring Policy calls for each station to develop a ranked list of inventories and monitoring surveys (Inventory and Monitoring Plan, Part 1). Inventories and monitoring need to support decision making, therefore the station Habitat Management Plan (HMP), stepped down from the Comprehensive Conservation Plan (CCP), should precede the Inventory and Monitoring Plan (IMP). The RRB, DRRB, LMRD, Regional Hydrologist, and Zone Biologists provide technical assistance to stations for the development of their CCPs and HMPs.

Regional I&M staff, in collaboration with the RRB, assisted refuge stations with the development of their IMP, Part 1. Once a refuge station's IMP, Part 1 is approved, the I&M staff will work with individual stations to help them implement their IMP, including Part 2 of the I&M Policy. This will involve identifying, revising or developing a peer-reviewed protocol, an appropriate database, sampling design, training, and finding the necessary resources to carry out a high quality survey.

Past and current inventory and monitoring priorities are embodied in existing monitoring programs and projects on refuges and in a few multi-station, multi-agency adaptive management projects. It will be a high priority for I&M staff to support these existing projects to their logical conclusion.

A Biological Needs assessment will identify resource management issues and inventory and monitoring priorities that are shared among stations. The highest priority resource management issues may evolve into new adaptive management projects. One issue that the Migratory Birds Management Program has elevated as a priority is the alarming continental decline in grassland bird populations; refuges have a major role to play in providing habitat for grassland birds, especially in the Prairie Pothole Region. This issue was the focus of several workshops in FY11, facilitated by the I&M Coordinator in cooperation with Migratory Bird Management Program staff. We look forward to addressing recommendations arising from a multi-region SDM workshop held in September 2011 and focused on this issue.

1.4. Explain how the regional I&M initiative coordinates with partners via the Landscape Conservation Cooperatives (LCCs). Which LCC's are included in the regional I&M initiative? What role does the regional I&M initiative serve within the LCC?

The three major LCC's in Region 3 are the Plains and Prairie Pothole (PPP LCC), Great Lakes (GL LCC), and Eastern Tallgrass Prairie and Big Rivers (ETP/BR LCC). Region 3 also contains small portions of the Gulf Coastal Plains and Ozarks LCC and the Appalachian LCC.

The Region 3 I&M Branch will focus efforts where there are overlaps among national, regional, and refuge-level FWS priorities. Regional priorities are identified by the Refuge Leadership Team (Regional Refuge Chief, advised by the Refuge Supervisors, and the Regional Chiefs of Biological Resources, Private Lands, Planning, and Fire), taking into consideration the needs of other Service programs (e.g., Migratory Birds, Fisheries, Ecological Services) and the LCC's. The Regional Refuge Biologist, advised by the Leadership Team, integrates the needs of these different entities, and identifies priorities for the I&M Branch. The R3 I&M staff collaborate with personnel from other Service divisions to avoid duplication and ensure I&M activities will have multiple benefits in the region.

The Leadership Team identifies and approves emerging priority issues that warrant significant staff time. All DBR staff work together to address these needs. The process we have tested and refined for addressing management problems is to assemble a small team of key people for a structured decision making workshop, led by a facilitator and a modeler. The RRB or DRRB will identify key staff for the workshop; key staff will likely include LCC partners, or staff from other FWS programs. Difficult management problems on refuges are often shared by other LCC partners, especially states and NGO's. The decisions and recommendations arising from this workshop are evaluated and prioritized along with existing priorities by the Leadership Team. If adaptive management, inventory or monitoring needs are identified as a priority, the I&M Branch is called upon to help address them. We strive to collaborate on I&M activities with other FWS Programs and the LCC partners, where priorities and needs overlap.

A number of monitoring activities on refuges are requested / required by other USFWS Programs, especially Migratory Birds. For example, many refuges conduct waterfowl banding, four-square mile surveys, mid-winter waterfowl surveys, woodcock surveys, mourning dove surveys, butterfly surveys, Breeding Bird Surveys, etc. that are designed and managed by other programs or agencies. At the regional level, we need a process for identifying which monitoring efforts a given station should participate in and which ones they should phase out to accommodate higher priorities. This will be necessary before Inventory and Monitoring plans can be completed at the station level. The I&M Coordinator will work with the RRB or DRRB and Refuge Supervisors to develop the above process.

2. Staffing

2.1. Provide a list of regional I&M staff and their job type or role, grouped by LCC. Also include a list of key cooperators (with their affiliation and role) who will be actively involved with the region's activities on at least a monthly basis during the coming year. Indicate vacancies and plans for refilling.

Please refer to the map of stations by LCC (Appendix A) and the organizational chart (Appendix B).

Position	Staff Name	Location	LCC	Geographic Area
Chief, Division of Biological Resources	Patricia Heglund	La Crosse, WI	Region-wide	Regional/National
Regional Hydrologist	Josh Eash	Bloomington, MN	Region-wide	Regional/National
Hydrologic Tech	Jennifer Greutzman	Bloomington, MN	Region-wide	Regional/National

Hydrologist	Brian Newman	Bloomington, MN	Region-wide	Regional/National
Regional Data Manager	Vacant Ben Schlifer, contractor	USGS, La Crosse, WI	Region-wide	Regional/National
Inventory & Monitoring Coordinator	Melinda Knutson	La Crosse, WI	Region-wide	Regional/National
Zone Biologist, Prairies	Vacant	Fergus Falls, MN	Plains and Prairie Pothole LCC	Regional/National
Station I&M Biologist	Jessica Dowler	Glacial Ridge NWR	Plains and Prairie Pothole LCC	Regional
Data Manager, Prairies	Vacant	Fergus Falls, MN	Plains and Prairie Pothole LCC	Regional
Zone Biologist, Great Lakes	Sean Blomquist	Ottawa NWR	Great Lakes LCC Appalachian LCC	Regional/National
Station I&M Biologist	Eric Dunton	Shiawasee NWR	Great Lakes LCC	Regional
Data Manager, Great Lakes	Vacant	Ottawa NWR	Great Lakes LCC Appalachian LCC	Regional
Zone Biologist, Big Rivers	Brian Loges	Two Rivers NWR	Eastern Tallgrass Prairie & Big Rivers LCC Gulf Coastal Plains & Ozarks LCC	Regional/National
Station I&M Biologist	Mick Hanan	Great River NWR	Eastern Tallgrass Prairie & Big Rivers LCC	Regional
Data Manager, Big Rivers	Vacant	Two Rivers NWR	Eastern Tallgrass Prairie & Big Rivers LCC Gulf Coastal Plains & Ozarks LCC	Regional

Key Cooperators:
Deputy Regional Refuge Biologist (Vacant)
Land Management Research and Demonstration Biologist (Pauline Drobney)
Decision Analyst/Modeler (contractors: Eric Lonsdorf and Sarah Jacobi, Chicago Botanical Gardens)
FWS Migratory Birds, Bird Monitoring Coordinator (Katie Koch)
LCC Coordinators and Science Coordinators for the LCC's that overlap R3

Roles and Responsibilities
Refuge Biologist – Inventory and Monitoring Specialists (GS 9/11):

- Model biological program excellence at the field station while contributing to the promotion, development, and implementation of a regionally and nationally coordinated biological inventory and monitoring program.
    - Complete HMPs and the IMP, Part 1 for their home station. Assist refuge biologists at other stations to do the same.
    - Once the IMP, Part 1 is completed, begin to develop IMP, Part 2 (protocols).
    - Maintain high priority, ongoing I&M activities, as directed by the station manager, until a new station IMP is in place.
- Work with the Refuge Biology Network and the Zone Biologist associated with their home station to identify and fulfill common inventory and monitoring needs across the Network.

- Work with others in the region and nationally to develop processes for cataloging and extracting useful information from legacy data sets at refuge stations.
- Test and evaluate protocols, databases, and processes developed by I&M work groups, either nationally or regionally.
- Assume the role of Project Coordinator, or Station Coordinator, for one multi-station adaptive management project, if needed.
- Along with the Zone Biologist, other DBR staff, and other refuge biologists, represent R3 Refuges and participate as appropriate in technical or work teams associated with their home LCC.

Zone Biologists (GS 11/12):

- Along with the RRB and DRRB, serves as a resource for field stations in need of scientific technical assistance for resource management problems.
- Work with the Refuge Biology Network and the associated field I&M Specialist to and fulfill common inventory and monitoring needs across the Network and the LCC.
- Assist stations, as requested by the RRB or ARRB, regarding identifying high priority resource management problems, and completing HMPs and IMPs.
- Assist Regional Inventory and Monitoring Coordinator with detailed planning, organization, and implementation of activities within the Inventory and Monitoring Branch.
- Represent R3 Refuges and participate in or lead, as appropriate, work teams associated with the national or regional I&M Branch or associated with I&M needs of the LCC. This includes the development of inventory and monitoring protocols, databases, and reporting systems.
- Provide leadership and technical assistance, as needed, to station biologists and the LCC partnership. Technical assistance may involve leading or serving on work teams, reviewing monitoring protocols and sampling designs, and reports, facilitating structured decision making workshops, and identifying management questions and needs.
- Assume the role of Project Coordinator, or assume some other appropriate leadership role for one or more multi-station adaptive management projects, as needed. This includes maintaining the Project Record, developing and reviewing survey protocols and sampling designs; planning and delivering training, and overseeing monitoring data collection and management, analysis, interpretation, and reporting. Strive for efficiency, high technical quality, accurate documentation, and strong data management. Strive to publish the results of refuge research and adaptive management projects promptly.
- Work with others in the region and nationally to develop processes for cataloging and extracting useful information from legacy data sets at refuge stations.
- Test and evaluate protocols, databases, and processes developed by I&M work groups, either nationally or regionally.
- Participate in teaching courses at the USFWS National Conservation Training Center, as needed and as appropriate for their expertise.

3. Planned Activities and Anticipated Products

Summarize the major planned activities and anticipated products of the initiative for the coming year in the categories below. If no activity is planned in a certain category, do not include it. Use a table format similar to the examples (Tables 1 and 2) below. Table 1 captures planned activities by Blueprint Objective; Table 2 captures planned events such as symposia, program reviews, training, and workshops. Some activities may fit into multiple categories; please report each activity only once under the most appropriate heading

Table 1. Region 3 Inventory and Monitoring Activities, Staff, Funding and Status by Project or Theme

Blueprint Objectives and Tasks	Project or Theme; Status and Accomplishments	Product/Task	I&M Staff	Funding I=I&M R=Refuges O=Other	Status P=Planned F=Funded IP=In progress C=Completed
	3.1 IDENTIFY I&M PRIORITIES				
General A	*Status of station Habitat Management Plans (HMP)*	In progress: Big Stone, Fergus Falls, Morris, Litchfield, Rice Lake, Necedah, Neal Smith, Clarence Cannon, Two Rivers, Crab Orchard, IL River, Trempealeau, Port Louisa, Cypress Creek, Muskatatuck, Seney	Refuge Biologists, Project Leaders, Zone Biologists RRB	R, I	IP
General A	*Status of station Inventory and Monitoring Plans (IMP)*	Planned: Whittlesey Creek, Mingo, Big Stone, Fergus Falls, Morris, Litchfield, Rice Lake, Necedah, Neal Smith, Clarence Cannon, Two Rivers, IL River, Cypress Creek, Musckatatuck, Seney	Refuge Biologists, Project Leaders, Zone Biologists RRB	R, I	IP
General A	*Biological Needs Assessment, including inventory and monitoring priorities* Station visits completed in FY11, information will be summarized in FY12	Draft Biological Needs Assessment Report, including a summary of priorities for inventories and monitoring.	All DBR staff	R, I	IP
	3.2 ABIOTIC RESOURCES – INVENTORIES				
1A	*Water Resource Inventory and Assessment (WRIA)*	Complete: Hamden Slough, Shiawasee In Progress: Port Louisa, Iowa River Cooridor Planned: Cypress Creek, Big Muddy, DeSoto, Boyer Chute, Horicon	Josh Eash, Brian Newman	R, I	C,IP, P
1B	*Hydrogeomorphic Analysis (HGM)*	Planned: Lower Missouri River Corridor; includes Big Muddy, Boyer Chute, DeSoto, Squaw Creek, and Bottomlands (new refuge)	Josh Eash,	R, I, O	P
1A	*Compile and distribute on request existing abiotic data sets as identified in Fulfilling the Promise WH8.1*	Training for refuge stations and planning office regarding how to access data sets	Data manager	I	P
	3.2.1 ABIOTIC RESOURCES – MONITORING				

Blueprint Objectives and Tasks	Project or Theme; Status and Accomplishments	Product/Task	I&M Staff	Funding I=I&M R=Refuges O=Other	Status P=Planned F=Funded IP=In progress C=Completed
2A	*Water Monitoring – Refuge Stations* 12 stations have some form of water monitoring conducted and supported by the R3 Water Resources Branch. The R3 'water monitoring network' currently consists of approximately 100 individual sites that continuously collect water quantity and quality measurements of Refuge surface and ground waters.	Water monitoring data collection, analysis, database management and reporting.	Josh Eash, Jennifer Gruetzman	I,R	IP
2A	*Regional / National Water Monitoring Network*	Draft Water Monitoring Protocols	Josh Eash, Jennifer Gruetzman	R, I	IP
General	*Wilderness Character Monitoring*	Support wilderness character monitoring on all R3 stations with designated wilderness	Melinda Knutson	I	IP
	3.2.2 BIOTIC RESOURCES – INVENTORIES				
1C	*T&E Species data in ECOS*	Verify and update T&E species data from R3 stations in ECOS	Melinda Knutson	I	P
1D	*Baseline inventories of vertebrates, plants, etc.*	Work with national office to design an inventory for broad occurrence of species across refuges	Melinda Knutson	I	P
1D	*Vegetation / Land Cover maps*	Work with Regional Planning Office staff to assess needs for updating station vegetation maps	Melinda Knutson	I	P
1D	*Plant inventories*	Work with Joe Robb and Rich King to develop a protocol for plant inventories	Melinda Knutson	I	P
1D	*Forest Inventory* The Great Lakes Biology Network (all refuge biologists) are conducting forest inventories on refuge lands within the Network.	Project Record, Fact Sheet, and protocols	Greg Corace	R	IP
1D, 3C	*Grassland Bird Inventory of Refuge Stations*	Proposal submitted for funding	Sara Vacek	R, O	IP
	3.3 BIOTIC RESOURCES – MONITORING				
4B	*Partner with the USA National Phenology Network*	Assess current participation and need for R3 stations to use NWRS portal on NPN	Melinda Knutson	I	P

Blueprint Objectives and Tasks	Project or Theme; Status and Accomplishments	Product/Task	I&M Staff	Funding I=I&M R=Refuges O=Other	Status P=Planned F=Funded IP=In progress C=Completed
3C	*Bird Monitoring* National Bird Monitoring Team Provide leadership to National Bird Monitoring Team to address pressing bird monitoring issues shared by multiple Regions.	Identify national priorities. Develop annual work plan. Schedule monthly conference calls, plan WebEx Seminars as needed.	Melinda Knutson, Laurel Barnhill, Lee O'Brien	I	IP
3C	*Rank Regional Bird Monitoring Efforts in R3* Prioritize regional and national bird monitoring efforts in cooperation with FWS Migratory Bird Management. This info will be used to develop station IMPs.	Regional and national bird surveys ranked, by Region 3 station.	Melinda Knutson	I	P
3C	*Marsh bird Data – Share with Avian Knowledge Network* Review R3 marsh bird data in the USGS Patuxent WRC database and revise as needed.	Data sets 'cleaned'. Mark Wimer to transfer data to AKN	Kathy Bibby	R	IP
	Savanna management and monitoring Develop handbook for management of savanna ecosystems	Handbook	Pauline Drobney, Lizzy Berkley	I, R	IP
	3.4 STRESSORS				
	Climate Change See Biological Needs Assessment (above) and symposium (below)				
4A	*SSP (R9 and R3): SHC in the face of climate change: Bridging the research-implementation gap and accounting for interactions among conservation threats* Project in Year 3	Examining stressors (like projected changes in climate and housing density over the next 100 years) and their effects on different organisms with different mobility among protected areas. FY11: Housing density and NWRS National-wide assessment completed.	Chris Hamilton, Pat Heglund	R, O	IP
1D	*National Pollinator Working Group*	Increase refuge awareness of management effects on pollinators	Wedge Watkins	R	IP
4A	*SSP (R9 and R3, above) and Federal Highways Funding: Refuge Vulnerability Assessment Handbook*	Finalize handbook	Granholm, Collins, Harris, Adamcik, NatureServe	R, O	IP
	3.5 ADAPTIVE MANAGEMENT PROJECTS				

Blueprint Objectives and Tasks	Project or Theme; Status and Accomplishments	Product/Task	I&M Staff	Funding I=I&M R=Refuges O=Other	Status P=Planned F=Funded IP=In progress C=Completed
1F, 3C	*Integrated Waterbirds Management and Monitoring Program (IWMM)* Multi-region, multi-agency project to manage and monitor migrating and wintering waterbirds, including waterfowl, shorebirds, and marsh birds. Partnership with Migratory Birds, states, NGO's (Agassiz, Clarence Cannon /Great River, Cypress Creek, Mingo, Port Louisa, Rice Lake, Seney, Squaw Creek, Trempealeau , Two Rivers NWR, Morris WMD, Upper Miss NWFR-La Crosse, Savanna, Winona Districts)	Pilot phase Formal Administrative Structure and Team Responsibilities. Project Record. Fact Sheets. Central database. Protocol. Upper Mississippi Regional Waterbird Team (Reg 3). Supplemental moist-soil veg assessment protocol (Reg. 3). 8 biotechs hired through DU contract Regions 3, 4, and 5 (primary funding from migratory birds). Partnership with EPA's national wetland condition to validate habitat assessments.	R3 lead - Brian Loges Melinda Knutson Pat Heglund, science team members	R, I, O	IP
1F, 3A	*Native Prairie Adaptive Management (NPAM)* Multi-region project to sustain native plant communities on unplowed prairie. (R3 stations: Windom WMD, Big Stone NWR, Morris WMD, and Detroit Lakes WMD)	Operational phase First year of FWS management of project. (National lead: Camie Dixon)	R3 lead - Sara Vacek	R, I, O	IP
1F, 3C	*Impoundment management to support migratory waterbird use (RCRP)* Multi-region project to maximize waterfowl and shorebird use of refuge impoundments.	Final Report Recommendations to managers	Pat Heglund	R, O	IP
1F, 3A	*Cattail control through prescribed fire (RCRP)* Multi-region project to test the efficacy of controlled fires to minimize cattail dominance of wetlands.	Final Report Recommendations to managers	Pat Heglund	R, O	IP
1F, 3A	*Reed canary grass control and transition to wetland forests and meadows (RCRP)* Multi-region project to minimize reed canary grass dominance of forests and meadows. (Upper Mississippi River NWR, Winona, La Crosse, and McGregor Districts, Port Louisa NWR, Minnesota Valley NWR, Squaw Creek NWR, Swan Lake NWR)	Operational phase Project Record, Fact Sheet, database, Sharepoint Decision Tool, and long-term protocols, Final Report, transition to FWS leadership	R3 - lead Kathy Bibby	R, I, O	IP

Blueprint Objectives and Tasks	Project or Theme; Status and Accomplishments	Product/Task	I&M Staff	Funding I=I&M R=Refuges O=Other	Status P=Planned F=Funded IP=In progress C=Completed
1F, 3A	*Restoring native plant diversity in native grasslands (AM Consultancy)* Multi-agency project to restore and maintain high quality native grasslands in Minnesota and the Dakotas. Partnership with The Nature Conservancy and MN DNR. R3 stations collecting data include Morris WMD and Glacial Ridge NWR. Big Stone NWR participated in project design.	Operational phase Project Record, Fact Sheet, database, and protocols	Sara Vacek, coordinator, Jessica Dowler	R, I, O	IP
1F, 3A	*Use of sediment removal in wetland restorations (AM Consultancy)* Multi-station project to evaluate alternative strategies for restoring small wetland basins (Minnesota Private Lands Office, Morris WMD, Fergus Falls WMD, Detroit Lakes WMD, Windom WMD, Rydell NWR, Glacial Ridge NWR) Partnering with NRCS and MNDNR	Operational phase Project Record, Fact Sheet, database, and protocols	Lori Stevenson	R, I, O	IP
1F, 3A	*Invasives in Forests (AM Consultancy)* Multi-station project to inventory invasive plants in forested stands, prioritize management, and conduct follow-up monitoring. (Big Oaks, Cypress Creek, Mingo, Muscatatuck, Patoka River)	Set-up / pilot phase Project Record, draft protocols	Sean Blomquist	R, I, O	IP
1F, 3A	*Lakeplain prairie restoration (AM consultancy)* Multi-station project to restore and maintain diverse prairie. (Shiawassee, Detroit River, Ottawa NWR)	Set-up / pilot phase Project Record, draft protocol	Eric Dunton, Sean Blomquist	R, I, O	IP
	3.6 DATA MANAGEMENT				
General A		Fill regional database manager/IT position	Pat Heglund	I	P
General A	Archive legacy data (GRAS)	Work with national office to archive legacy data (Seney NWR)	Brian Loges, lead		
General A	Catalog all surveys currently conducted and planned on NWRS in R3 (PRIMR)	Review PRIMR database, update with current information from stations	Sean Blomquist, lead All DBR staff	R	IP
General A	Individual databases are maintained for each AM Project (see above)	Data are verified, summarized, and archived.	Database manager	I	IP
General A	Region 3 Time-Series Water Resources Database (WISKI)	Water monitoring data analysis, storage and reporting.	Jennifer Gruetzman	R, I	IP

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General A	Data sharing: R3 refuge landbird and marshbird data will be shared from USGS Patuxent Wildlife Research Center to the Avian Knowledge Network. R3 did extensive marshbird database management in FY11 to prepare for this data sharing.	Avian Knowledge Network (AKN) will be updated with landbird and marshbird data	Mark Wimer (USGS) and Katie Koch (Migratory Birds)		IP
	3.7.1 COMMUNICATION - TRAINING				
General	*Designing and Implementing a Biological Monitoring Program*, training at the National Conservation Training Center (NCTC)	Instructors are working on a revision of the course, planned offering fall 2012	Melinda Knutson (instructor team)	I, R	C
1F	*Introduction to Structured Decision Making*, training at the National Conservation Training Center (NCTC)	Participate in teaching team	Sean Blomquist (instructor team)	I, R	C
3C	*Banding Certification & Training*	Plan banding training for shorebirds or waterfowl	Pat Heglund	R,I	C
General	*USFWS/USGS Structured Decision Making Workshop-observer*	Continue training DBR staff, as needed. Participate in instructor teams as needed.		I,R	C
General	*NWRS Biological Program Fundamentals*, training at the National Conservation Training Center (NCTC)	Continue training R3 staff, as needed. Participate in instructor teams as needed.	Pat Heglund Pauline Drobney Rich King (instructors) Sean Blomquist Brian Loges	I,R	C
1A	*Habitat Management Planning*, online training through the National Conservation Training Center (NCTC)	Continue training R3 staff, as needed. Participate in instructor teams as needed.	Pauline Drobney Pat Heglund (Instructors) Sean Blomquist Brian Loges Eric Dunton	I, R	C
	3.7.2 COMMUNICATION - PROGRAM REVIEWS				
1F	*Refuge Cooperative Research Program (RCRP) Review* Workshop held to review the first five years of the program and recommend revisions. RCRP is a joint NWRS/USGS Program that employs adaptive management to address difficult resource management problems. Product will be a draft white paper summarizing the recommendations.	Final report	Pat Heglund Melinda Knutson	R, I, O	IP

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	3.7.3 COMMUNICATION - WORKSHOPS				
	3.7.4 COMMMMUNICATION - SYMPOSIA				
General	*The Wildlife Society Annual Meeting – Symposium 'Helping Resources Managers Cope With Threats and Change'* 7 Nov 2011	Submit manuscripts to journal, April 2012	Melinda Knutson, Pat Heglund	I, R	P

4. Budget Narrative and Budget

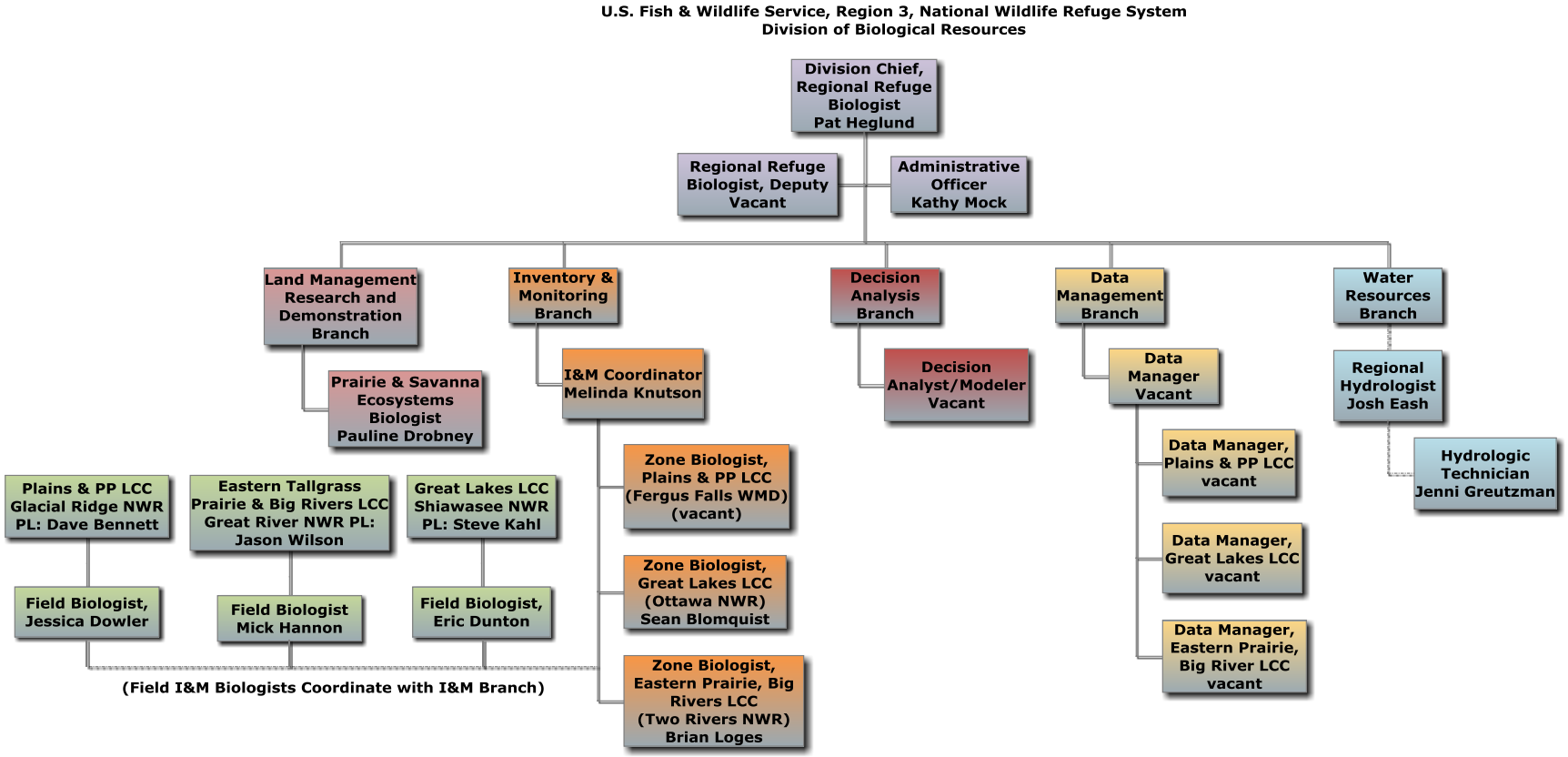
4.1. Provide a brief description of how current and projected I&M funding is anticipated to be spent during the upcoming FY, including the major work activities presented in Section II. List the major planned expenditures of I&M funds, including staff salaries and operations, contracts and agreements. Do not include contributions from outside the I&M funded initiative in the work plan. (Matching, in-kind, and leveraged funding from outside the I&M initiative will be included in the annual I&M administrative report.)

We are under a continuing resolution. We anticipate that the expenditures in FY2012 will be similar to FY2011, shown below.

FY 12 Anticipated R3 Inventory & Monitoring Expenditures

CATEGORY	TOTAL
Salaries & Benefits (includes partial HAPET, Fergus Falls)	$1,455,057
Travel/Transport	$73,997
Other Services	$218,961
Fuel/Supplies/Materials	$99,646
Equipment	$ 42,780
Land/Structures	$10,964
Grants	$5,791
Communication	4,622
TOTAL ALLOCATION	**$1,911,818**

5. Appendix A. Organization of the Region 3 Division of Biological Resources



5. Appendix B. Region 3 NWRS Stations and LCC's.